REMARKS

Claims 1-77 were examined in the office action mailed on August 05 1005 ("Outstanding Office Action"). Applicants note with appreciation that claims 24-37 are allowed, and that claims 6-15, 20-23, 42-44, 50-52, 57, 58, 64-71 and 75-77 would be allowable if written in independent claim format. Claims 1-2, 5, 16-19, 38-41, 45-46, 49, & 53-56 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No.; 6,577,653 issued to Rochberger (hereafter "Rochberger"), and the specification has been objected to.

By virtue of the foregoing amendments, the specification is sought to be amended to fix various typographical errors and to address the objection raised in the Outstanding Office Action, claims 1, 16, 38-45, 53, 59 and 72 are sought to be amended, and new claims 78 is sought to be added. The additions and amendments are believed not to introduce new subject matter, and their entry is respectfully requested. Claims 1-78 are thus presented for consideration.

Claim 1 has been rejected under 35 U.S.C. § 102(e) as being anticipated by Rochberger. It is respectfully asserted that Rochberger (alone or in combination with other art of record) neither anticipates nor renders obvious the invention of claim 1. Claim 1 recites in relevant parts that:

> A method of setting up a plurality of virtual circuits between a first end system and a second end system, said plurality of virtual circuits being set up on a network connecting said first end system to said second end system, ***each of said plurality of virtual circuits terminating at said first end system and said second end system***, said method being performed in a device between said first end system and said second end system, said method comprising:
>
> sending ***to said second end system*** a first signaling message requesting ***said plurality of virtual circuits to be set up***.
>
> (Original Claim 1, ***Emphasis Added***)

From the above, it may be appreciated that claim 1 recites sending a single signaling message to a second end system requesting multiple virtual circuits to be setup, with each virtual circuit terminating at the first end system and the second end system.

In sharp contrast, Rochberger discloses virtual circuits terminating at source edge nodes 14 and 18, and are setup differently. In particular, Rochberger discloses in relevant parts that:

> If the route calculation to the destination failed (step 32) due to `Cell Rate Unavailable,` the method of the present invention is used to ***find multiple VCCs from the source to the destination and aggregate them together to form a single connection***.
>
> ...
>
> If both source and destination nodes do not support the feature, the method terminates as a route cannot be found and the SETUP request fails with an error indication of `Cell Rate Unavailable.` ***If both source and destination nodes do support the feature, the route with the largest bandwidth is calculated (step 36)***. This can easily be done in PNNI when performing a `best effort` route calculation while optimizing on bandwidth. In this case, if there is connectivity to the destination, then the routing calculation will find a path with the largest bandwidth.

Once the route With the largest bandwidth is found, a SETUP message is sent specifying the maximum bandwidth of the route just calculated (step 38). This bandwidth is termed BW.sub.1. The bandwidth originally requested by the user is represented as BW.sub.ORIG. The SETUP message also comprises other parameters including a unique indication of the call and a Last Connection Identifier (LCI). The unique identification of the call is preferably global within the PNNI routing domain. An example of a unique identification that can be used is the global Network Connection Correlation Identifier (NCCI) parameter that is part of the PNNI Version 2.0 standard. The NCCI is assigned by the source node to identify calls within the network. Note that there can be more than one route that is assigned the same NCCI parameter.

The Last Connection Identifier (LCI) is assigned by the originating edge node and is also sent in the SETUP message. It functions to indicate whether the associated route is the final connection that is used to construct the total call. The values for the LCI include: `first`, `intermediate` or `last` route connection indications. Since this is the first route for the call, the LCI parameter is set to `first`.

Once the SETUP message is sent, ***the source node waits for the receipt of a CONNECT message reply (step 40). Once received, the following steps are repeated*** until the bandwidth request is fulfilled or the routing fails for lack of routes with sufficient bandwidth. A second route with the largest bandwidth is calculated (step 42). Note that it is not a constraint that the routes be mutually exclusive. The routes calculated can have shared nodes and links as long as sufficient bandwidth is available. The bandwidth of the new route just determined is represented as BW.sub.2.

A new SETUP message is sent to the destination using the newly calculated route (step 50). The bandwidth requested in the SETUP message is determined using Equation 1 below.

From the above, it is believed the source edge nodes of Rochberger use SETUP messages to setup only a single virtual circuit terminating between the source edge nodes.

In rejecting original independent claim 1, it was stated in the Outstanding Office Action that, "Referring to claim 1, Rochberger teaches: 14 per Fig 1 or ***first end system*** which sends a setup message for multiple VCs to 18 per Fig 1 or ***second end system*** per col. 11 line 49-col. 12 line 45 per Figs 3A & 3B." (***Emphasis Added***).

The differences of amended claim 1 as relevant to the "first end system" of Rochberger are explained above.

With respect to the differences of amended claim 1 as relevant to the "second end system" of Rochberger, it is respectfully pointed that the individual virtual circuits of Rochberger also terminate at source edge node 18, and the description of Figures 3A and 3B of Rochberger appears to relate to the manner in which source edge node 18 communicates with destination end station 20.

As amended claim 1 recites that the virtual circuits terminate at the second end system and that the request is sent to the second end system, the description of Figures 3A and 3B of Rochberger also neither anticipates nor renders obvious amended claim 1.

Accordingly, it is asserted that Rochberger neither anticipates nor renders obvious amended independent claim 1.

Original claim 2 is also independent allowable over Rochberger in reciting that "... wherein said first signaling message comprises a plurality of information elements, wherein a first information element is designed to request set up of a single virtual circuit comprised

in said plurality of virtual circuits, and a second information element is designed to request set up of a second plurality of virtual circuits comprised in said plurality of virtual circuits".

Amended independent claim 16 is similarly allowable in reciting that the signaling request requesting multiple virtual circuits to be set up is received from a first end system at which the virtual circuits terminate. Rochberger does not disclose or suggest such a feature since multiple virtual circuits are present only between source edge nodes 14 and 18 (of Rochberger), and as noted above there appear to be requests to setup only individual virtual circuits the two source edge nodes.

All the remaining independent claims presented for consideration are allowable for one or more reasons noted above. The presented dependent claims are allowable at least as depending from an allowable base claim.

Thus, all the claims presented for consideration are believed to be allowable over the art of record. The Examiner is invited to telephone the undersigned representative if it is believed that an interview might be useful for any reason.

Respectfully submitted,

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